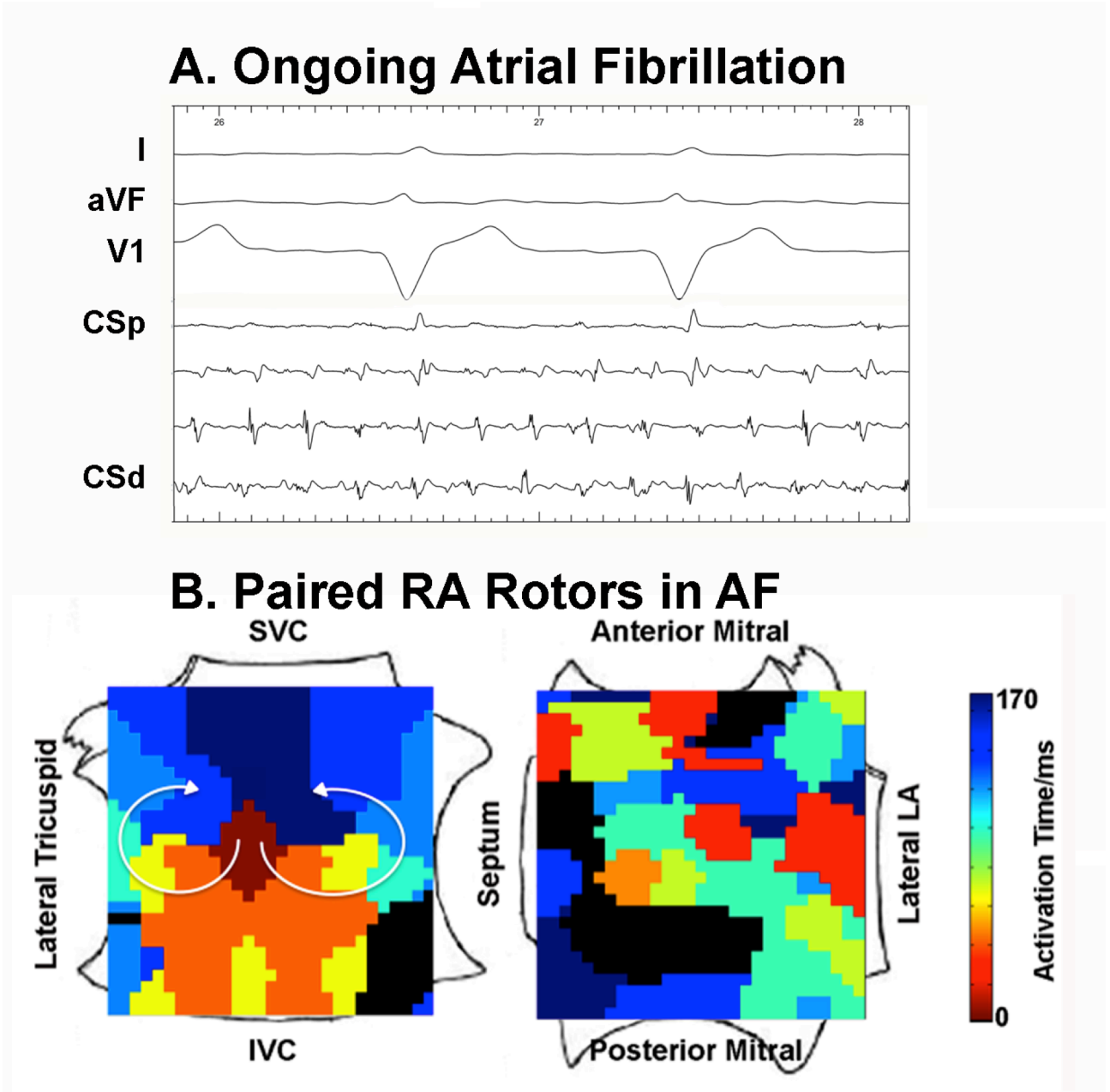
SUPPLEMENTAL MATERIAL

Supplementary Figure 1



Supplementary Figure 1. Paired clockwise and counterclockwise spiral waves during AF. (A). Electrograms of AF. (B) Isochronal map of both atria during AF, showing paired spirals in the right atrium.

Movie 1. Elimination of re-entry due to excitable gap formation after ablation. This gap was invaded by surrounding fibrillatory waves and caused wavefront collision, thus terminating AF. See figure 2 and text for further details.

Movie 2. Elimination of re-entry due to ablation of a high excitability domain. This results in detachment of the spiral wave from the obstacle and migration outside of domain to a non-conducting boundary. See figure 3A-B for more details.

Movie 3. Elimination of re-entry due to ablation of a low excitability domain. This creates an activation front that propagates with higher wave speed and causes wavefront/tail collision and block, ultimately causing detachment and termination of re-entry. See figure 3C-E in text.

Movie 4. Terminating re-entry by ablation of an isthmus. The isthmus between the red bars has a linear gradient in diffusion constant. The mismatch in resulting CV between isthmus and surrounding tissue creates figure-of-eight reentry. See figure 5 and section V of results for further details.